

Application No.: 10/736,981

Docket No.: 713-981

REMARKS

Applicants appreciate the Examiner's thorough review of the present application, and respectfully request reconsideration in light of the preceding amendments and the following remarks.

Claims 1-20 are pending in the application. Claim 4 has been rewritten in independent form including all limitations of base claim 1 and intervening claim 3. Claims 1-3 and 5-8 have been amended to better define the claimed invention. New claims 9-20 have been added to provide Applicants with the scope of protection to which they are believed entitled. Appropriate headings have been added to the specification and a new Abstract conforming to commonly accepted US patent practice has been submitted. No new matter has been introduced through the foregoing amendments.

The Office Action does not include a copy of the PTO-1449 submitted with the information disclosure statement filed December 17, 2003. Applicants respectfully request that the information submitted in the above identified IDS be considered and a copy of the PTO-1449, with the Examiner's initial(s) placed adjacent to the citation(s) on the PTO-1449, be returned to Applicants' representative in the next office communication.

The objection to the specification is believed overcome in view of the above amendments.

The *35 U.S.C. 103(a)* rejection of claims 1-8 as being obvious over *Remmers* (U.S. Patent No. 5,533,851) in view of *Goring* (U.S. Patent No. 4,210,057) is noted.

Applicants respectfully traverse the rejection of claim 4 because the applied references clearly fail to disclose, teach or suggest the claimed feature that "the branches forming the zigzag of the expansion aperture form acute angles between them." As can be seen in FIG. 1 of *Goring* being relied upon by the Examiner for the claimed feature, the angles (at 12) between branches of the

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Goring zigzag are obtuse, rather than acute, angles. It should be noted that acute angle α denoted in FIG. 1 of *Goring* is between end face 17 of annular collar 11 and surface 16, rather than between branches of the zigzag. See column 12, lines 5-9 of *Goring*. The obviousness rejection of claim 4 is therefore inappropriate and should be withdrawn.

Applicant further traverse the rejection of independent claim 1 because the applied references clearly fail to disclose, teach or suggest the original claimed "non-straight continuous expansion aperture... axially spaced from the said slot." The Examiner did not specify with reasonable clarity where in the references such a unique feature can be found. See page 4, lines 6-7 from bottom of the Office Action. Applicants respectfully submit that both *Remmers* and *Goring* teach a single slot formed on each side of a tubular body as best seen in FIG. 5 of *Remmers* and FIG. 1 of *Goring*. Therefore, a proper combination, if any, of the references should include a single slot formed on each side of a tubular body. This single slot in the so combined device could not be considered to include a slot and an aperture axially spaced from one another. The obviousness rejection of claim 1 and its dependent claims is therefore inappropriate and should be withdrawn.

Notwithstanding the above, Applicants have amended claim 1 to further define over the art, solely for the purpose of expediting prosecution. Amended claim 1 now further requires that the aperture be axially spaced from the slot by a section of the wall of the intermediate expansion part. The single slot combined structure would fail to teach or disclose this unique feature of the claimed invention. Amended claim 1 is thus patentable over the applied art of record.

Claims 2-3 and 5-9 depend from claim 1, and are considered patentable at least for the reason advanced with respect to amended claim 1. Claims 2-3 and 5-9 are also patentable on their own merits since these claims recite other features of the invention neither disclosed, taught nor suggested by the applied art.

For example, as to claim 2, Applicant do not agree with the Examiner's allegation that the

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axial length of the aperture 12 in FIG. 1 of *Goring* is shorter than the axial length of the slot between legs 16a, 16b in FIG. 5 of *Remmers*. In *Goring*, aperture 12 extends for about 2/3 of the axial length of the tubular body, whereas in *Remmers*, slot 16a/16b extends for only about 1/2 of the axial length of the tubular body. Thus, the references specifically teach the opposite i.e., the axial length of the aperture 12 in FIG. 1 of *Goring* is greater than the axial length of the slot between legs 16a, 16b in FIG. 5 of *Remmers*.

As to claim 5, the applied references clearly fail to disclose, teach or suggest the claimed feature that each expansion aperture is continuously extended in a portion thereof adjacent to the bearing collar, by a side branch arranged to reduce the risk of tearing at the start of expansion. In the teaching reference of *McSherry* (U.S. Patent No. 4,752,170) side branch 8 is not continuous to the slot/aperture 12. See FIG. 4 of *McSherry*.

As to new claim 9, the applied references do not disclose, teach or suggest the claimed slots each of which have an Y shape.

New independent claim 10 is patentable over the applied references because the references do not disclose, teach or suggest the claimed aperture which is located between the slot and the second end and is non-continuous to said slot. As argued above with respect to claim 1, a combined device of *Remmers* and *Goring* should include a single slot and could not be considered to include a slot and an aperture non-continuous to the slot.

Claims 11-20 depend from claim 10, and are considered patentable at least for the reason advanced with respect to claim 10. Claims 11-20 are also patentable on their own merits since these claims recite other features of the invention neither disclosed, taught nor suggested by the applied art.

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For example, as to claims 13-14, the applied references clearly fail to disclose, teach or suggest the claimed feature that each of said apertures has opposite closed ends spaced from each other in an axial direction of said tubular body. The single slot structure of a *Remmers/ Goring* combined device could, at best, have only one closed end.

As to claim 15, the applied references clearly fail to disclose, teach or suggest the claimed wall section extending continuously for full 360 degrees in a circumferential direction of said tubular body between each of said apertures and the respective slot to separate said apertures and said slots from each other. The single slot structure of a *Remmers/ Goring* combined device could not have a separated slot and aperture; they must be parts of a single slot.

As to claim 17, note the discussion of original claim 4.

As to claim 18, the applied references clearly fail to disclose, teach or suggest the claimed wall portions that are located between adjacent ones of said sections of said zigzag shape and protrude radially inwardly towards an axis of said tubular body so as to prevent a fastening element to be inserted in the plug from engaging said aperture. See FIGs. 3, 6, 5, 10 of *Goring*.

As to claims 19-20, note the discussion of claim 9.

Each of the Examiner's rejections has been traversed. Accordingly, Applicants respectfully submit that all claims are now in condition for allowance. Early and favorable indication of allowance is courteously solicited.


The Examiner is invited to telephone the undersigned, Applicant's attorney of record, to facilitate advancement of the present application.

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To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

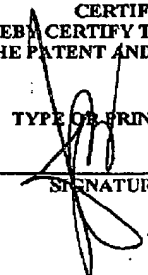
Respectfully submitted,

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